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**Historic Federal Role in Water Resources/Supply Development and National Water Commissions and Assessments (1950-2000)**

Good afternoon. My name is Betsy Cody. I am a specialist in Natural Resources Policy for the Congressional Research Service, Library of Congress and currently head the Natural Resources and Earth Sciences Section of the Resources, Science, and Industry Division. Thank you for this opportunity to respond to your request for background information on the current and historic federal roles in water supply development, as well as for information on several national water commissions, committees, and studies undertaken since 1950.

My purpose today is to provide an overview, or context, for a discussion of an effort to study and coordinate all aspects of federal water policy. My testimony covers two areas: 1) the evolution of federal project and program authorities for water supply development, touching briefly on federally supported water and wastewater treatment programs; and 2) major study commissions that have assessed water availability, institutional issues, and to a degree, facilities' needs over the past 50 years. [\(1\)](#) The information provided herein is for background and analytical purposes only as the subcommittee considers H.R. 3561, to establish the Twenty-First Century Water Policy Commission. CRS takes no position on pending legislation and does not make recommendations.

Today, the federal government is involved in a full range of water resources and water quality activities, ranging from water resources/supply development, to water quality regulation and species stewardship. However, the responsibility for development and management of the Nation's water resources is spread

among many federal, state, local, tribal, and private interests. Nearly two centuries of project development as well as environmental and resource management activities have created a complex web of federal and state laws and regulations, contractual obligations, and economies based on existing water resources infrastructure.

Overtime, numerous attempts have been made to review and/or coordinate federal water activities; a few of the more comprehensive efforts are outlined below. [\(2\)](#) These efforts have included creation of an Executive Branch agency to coordinate and plan for federal water activities, including activities of several river basin commissions (Water Resources Planning Act of 1965 (P.L. 89-80; 79 Stat. 245)), recent direction to the U.S. Geological Survey to report on efforts needed to undertake periodic assessments of water availability and use (House report language accompanying H.R. 2217; H. Rpt. 107-103, Department of the Interior and Related Agencies Appropriations Bill, 2002, June 19, 2001, p. 64) and now H.R. 3561, the subject of this hearing, which would establish the Twenty-First Century Water Policy Commission.

### **Evolution of Federal Project and Program Authorities [\(3\)](#)**

The current federal role in water policy has evolved over nearly two centuries to include significant federal investment in water resources infrastructure, creation of water quality standards and regulations, and laws affecting both the use and stewardship of aquatic resources. The first federal involvement in water resources development was for improving and maintaining waterways for navigational purposes. Navigational needs soon gave way to demands for federal investment in controlling floods and for providing water for irrigation. Since the turn of the 20<sup>th</sup> Century, the federal government has built thousands of individual water resource projects, primarily dams, dikes, and diversion projects whose principal purposes were for irrigation and flood control. One subset of these federal water resource activities is water supply development.

While the federal government has played a significant role in developing water resources through the construction of reservoirs for flood control and irrigation, historically it played a relatively minor role in funding construction of water supply and treatment facilities for municipal and industrial (M&I) uses. Instead, several programs exist to *assist* individually designated or eligible communities with development of water supply and treatment projects and it appears Congress is being asked more frequently to fund such programs. Historically, municipal and industrial (M&I) uses were incidental to the larger project purposes of flood control and water supply for irrigation. Consequently, most of the Nation's public municipal water systems have been built by local communities under prevailing state water laws. Consideration of other purposes, such as recreation and fish and wildlife, were later added statutorily to the purposes for which federal water resource projects were constructed, operated, and managed (*e.g.*, Fish and Wildlife Coordination Act (16 USC 460l-12)). [\(4\)](#)

### **Water Resource Projects of the Bureau of Reclamation and U.S. Army Corps of Engineers.**

In pursuit of developing water resources to provide water for irrigation and to control flooding, Congress authorized federal construction of numerous water resource projects throughout the middle to late 1900s. The largest federal water projects were undertaken by the Department of the Interior's Bureau of Reclamation (Bureau) and the Department of Defense's civil works agency, the U.S. Army Corps of Engineers (Corps). The Reclamation Act of 1902, as amended, and numerous project-specific acts authorized the construction of storage and irrigation works in the West. Even though Congress subsequently authorized other uses of project water, including M&I use, the historical emphasis of the Bureau's operations was to provide water for irrigation in the arid and semi-arid areas of the western states. Similarly, the Corps constructed large reservoirs primarily for flood control under numerous flood control acts throughout the

last century, but was authorized in 1958 to allocate water for M&I purposes if reimbursed by local sponsors (Water Supply Act of 1958, 72 Stat. 320; 43 USC §390b). In this Act, Congress emphasized the primacy of non-federal interests in water supply development.<sup>(5)</sup> Other, smaller flood control and water supply projects, *e.g.*, those built under the Small Watershed Program (P.L. 83-566, as amended; 16 USC 1001-1006), have been undertaken by the Department of Agriculture's Natural Resources Conservation Service (formerly Soil Conservation Service).

Over the past 20 years, the Bureau has been authorized to assist or construct several rural municipal water supply projects (often in lieu of previously authorized irrigation projects that were not built), as well as numerous small water recycling and reuse projects (Reclamation Projects Authorization and Adjustment Act of 1992 (Title 16 of P.L. 101-575), as amended; 43 USC 390h *et. seq.*).<sup>(6)</sup> Since 1992, the Corps has been authorized to assist with various "environmental infrastructure" projects ranging from wastewater treatment, combined sewer overflow, water supply, storage, treatment, and related facilities as part of successive Water Resources Development Acts in 1992 (§219 and §313), 1996, 1999, and 2000. While there have been appropriations for the Bureau's water re-use (Title 16) projects and certain Corps' environmental infrastructure projects, funding has not kept pace with project authorizations. Some have argued that the future implementation of the rural water supply, environmental infrastructure (§219, etc.), and water re-use (Title 16) projects has the potential to create an altogether new (and perhaps competing) mission for the Corps and the Bureau in contrast to their traditional multi-purpose water resources projects. Further, there is concern that these more recent authorizations may duplicate efforts under programs administered by other federal agencies such as the Environmental Protection Agency (EPA). Additionally, recent efforts to address ecosystem restoration needs and water quality issues in both Florida and California have included proposals for significant water supply features. These multi-billion dollar efforts have raised concerns about the proper federal role in providing water and water resource infrastructure to communities, about different federal/local cost-share policies, and about equity among the many water resource problems facing the country, especially in times of drought and competition for budgetary resources.<sup>(7)</sup>

**General Water Supply Development and Wastewater Treatment.** To date, M&I water supply development and wastewater treatment have principally been the domain of local interests and entities, with the federal government providing significant financial and technical assistance through various federal programs, including grants and loans. Except for the water resource projects noted above, these programs are found within the Department of Agriculture (Rural Utilities Service, Water and Waste Disposal Program<sup>(8)</sup>), the Department of Commerce (Economic Development Administration, Public Works and Development Facilities Program<sup>(9)</sup>), Department of Housing and Urban Development (Community Development Block Grants<sup>(10)</sup>), and the Environmental Protection Agency (Clean Water State Revolving Loan Fund (SRF) Program<sup>(11)</sup> and Drinking Water SRF Program<sup>(12)</sup>). (See attached CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*, updated February 1, 2002.)

The practical difference between the individual *project* authorizations of the Bureau and the Corps, and the *programs* of these other agencies is that individual project authorizations offer no predictable assistance, or guarantee of funding after a project is authorized, because funding must be approved *via* the congressional appropriations process. The programs, on the other hand, have set program criteria, are authorized for multiple years, are generally funded from year to year, and provide a process under which project sponsors compete for funding. Whether recent authorizations for rural water supply and re-use projects, water supply/ecosystem restoration projects, and environmental infrastructure projects signal a shift in congressional policy to a more direct or larger federal involvement in water supply development is not yet

clear.

**Looking Ahead.** Decisions about the future of U.S. water resources policy are inextricably linked to the past. Nearly two centuries of water resources project development has created a complex web of federal and state laws and regulations, contractual obligations, and economies based on existing water resources infrastructure. Complicating matters further is the complex and dynamic nature of the resource itself. The basic hydrologic cycle, floods, droughts, groundwater, and the chemical and biophysical nature of water are in a constant state of flux. Added to the resource complexities are the dimensions of human use. Water is abundant in some areas and not others. Making water available through irrigation was a key part of national policies to settle the West. In many areas, essentially all water has been allocated -- perhaps over-allocated in dry years.

While the implications of water use are most critically apparent at the local level, water flows across political boundaries. In the West, especially, many headwaters rise on federal lands, and numerous Indian Tribes hold treaty rights to many waters and related resources. With this complexity in the nature of water resources, over time, myriad laws have been enacted to allocate and regulate water use, protect its quality, develop its energy potential, contain its destructive powers, and maintain or enhance its biological integrity.

The many aspects of water resources supply and development and of the programs and processes involved engage the attention of numerous congressional committees and federal agencies. For Congress, this has resulted in a complex set of diverse and sometimes overlapping committee jurisdictions dealing with various aspects of water policy. For example, the issues discussed in this overview have largely been handled by four authorizing committees: the House Resources Committee, House Transportation and Infrastructure Committee, the Senate Energy and Natural Resources Committee, and the Senate Environment and Public Works Committee; however, some resource management issues (fisheries, wildlife, wetlands, and watershed management in particular) involve other, committees and subcommittees. Currently, at least 12 standing committees in the House and Senate have some jurisdiction over various components of federal water policy. Of the House Resources Committee alone, four of the five subcommittees have specific references to some aspect of water resources management in their jurisdictional descriptions. [\(13\)](#)

Further, several different executive branch departments and agencies are responsible for implementing various laws under the jurisdiction of these committees. These arrangements can complicate management of river systems and resources comprising large watershed areas such as the Missouri and Mississippi River Basins, Columbia and Colorado River Basins, and the California Bay-Delta, and even smaller systems, especially where anadromous fisheries are involved. Similarly, multi-jurisdictional management of water and resources found in the Great Lakes basin, the Florida Everglades, and the Chesapeake Bay, are challenging existing institutional structures to deal with various aspects of water policy. Not only do various departments and agencies have different and sometimes competing responsibilities, they also face the difficult task of coordinating their actions and decisions.

While many experts and some states have called for better coordination of federal water policy activities, Congress has not enacted any *comprehensive* change in federal water resources management since the Water Resources Planning Act in 1965 (P.L. 89-80; 42 USC 1962 *et seq.*) -- and this predates the substantial role of the Environmental Protection Agency in water quality protection since the early 1970s, as well as passage of the National Environmental Policy Act (NEPA) in 1969 and the federal Endangered Species Act (ESA) in 1973. Instead, Congress has enacted numerous incremental changes, agency by agency, statute by statute. Where coordination of federal activity has occurred, it has been driven largely by pending crises, such as

potential threatened or endangered species listings, droughts or floods, and by local or regional initiatives. Consequently, criticism of the fractured nature of water policy at the federal level has been a recurrent theme for decades. Yet, any attempt to untangle the complexities of current national water policy involves many constituencies with many differing interests. For example, states historically have been wary of federal involvement in intrastate water management and allocation issues and thus, even in cases where the federal government is directly involved in building water supply facilities, Congress has recognized that states generally have primacy in *intrastate* water allocation. [\(14\)](#)

As one can see, the federal role in water policy at the national level is both complex and dynamic. Efforts to pull together the many divergent problems and issues associated with water management have on several occasions included the use of commissions to identify ways to bring order or cohesion to the many and varied aspects of federal water policy. Several such efforts occurring in the latter part of the 20<sup>th</sup> Century are discussed below.

## Major Water Resources Studies and Commissions

Several major water resources studies and reports were issued by various commissions, committees, and councils in the last half of the 20<sup>th</sup> Century. (See summary information in the Appendix to this statement.) Efforts to understand and address the growing federal involvement in water resources development largely began in the mid-1930s with the Mississippi Valley Committee (1934) and the Water Resources Committee of President Franklin Roosevelt's Natural Resources Commission (1935-1937). Creation of the Tennessee Valley Authority and attempts to create other regional authorities for river basins throughout the country were debated and studied for decades. These efforts culminated with several major policy and assessment studies in the later part of the century. [\(15\)](#)

In December 1950, President Truman issued *A Water Policy for the American People*, which concluded that municipal supply development should "continue to be primarily a local responsibility," but advocated river basin planning and coordination to streamline development and financing needs, [\(16\)](#) including the tightening of economic standards for evaluating proposed projects and increased cost-sharing by local sponsors. In part because many recommendations for planning and coordination in Truman's 1950 report had not been implemented, because of growing tensions between the executive and legislative branches on water policy, [\(17\)](#) and because of the diversity of jurisdictions over water issues in Congress, the U.S. Senate convened a Senate Select Committee on National Water Resources in 1959.

**Senate Select Committee on National Water Resources.** [\(18\)](#) Members of the final Senate Select Committee on National Water Resources were appointed by the chairmen of the four Senate standing committees from which the membership was drawn. Four additional members were to be appointed by the Vice President (two Senators each from the minority and majority parties), for a final total of 17 Senators. [\(19\)](#) The final report of the committee was issued in January 1961, along with 32 studies and records from 23 hearings. The results of the report were debated in several successive Congresses, including many hearings before the predecessor to this Committee, the House Interior and Insular Affairs Committee. Noted in the Committee activity report for the 86<sup>th</sup> Congress was the fact that the water subcommittee had spent far more time on legislation not enacted than that which had become law that Congress. Many of the select committee's report recommendations became the foundation of the Water Resources Planning Act of 1965.

**Water Resources Council.** The Water Resources Planning Act of 1965 (P.L. 89-80; 79 Stat. 244 (42



USC 1962, *et seq.*) established the Water Resources Council (WRC), a federal-level water resources coordinating and planning body situated in the Executive Office of the President. Members of the Council included the Secretaries of the Interior; Agriculture; Army; and Health, Education and Welfare; and the chairman of the Federal Power Commission (later the Secretary of Energy). Secretary of the Interior Stewart Udall chaired the first Council. In 1975 (in P.L. 94-112), Congress expanded the WRC to include the Secretaries of Commerce, Housing and Urban Development, Transportation, [\(20\)](#) and the Administrator of the Environmental Protection Agency (EPA). Reportedly, these secretaries acted as associate members, with the Director of the Bureau of Budget (now Office of Management and Budget) and the Attorney General participating as observers. [\(21\)](#) The 1965 Act also created numerous River Basin Commissions which were charged with planning for water resources development on a watershed scale. The Council was specifically tasked with: 1) maintaining and preparing a biennial assessment of water supply and demand; 2) devising new principles, standards, and procedures for project evaluation; 3) establishing and maintaining liaison with River Basin Commissions established under the Act; 4) administering planning grants to states; and 5) effectuating interagency policy coordination in part by encouraging and reviewing river basin plans (§102(b)). The authorization for the WRC still exists (42 USC 1962a); however, the institution has not been funded since 1983.

The first WRC national water assessment was transmitted to Congress by President Lyndon B. Johnson on November 12, 1968. Its major emphasis was to provide "initial *assessments* of the adequacy of the Nation's water supply based on readily available data and limited analyses." [\(22\)](#) The report used the base year of 1965 for a 50-year time horizon for analyzing emerging problems in water resources development. Its findings necessarily reflected the data available at the time. The second WRC national water assessment was issued December 1978. [\(23\)](#) Its major findings reflected the first nationally consistent water use and supply projections for geographical regions, with the data indicating a need for better management to balance water quantity and quality. While the national assessments primarily addressed water availability, use, and trends and were rather data intensive, an intervening effort by the National Water Commission focused on water *policy* and resulted in 62 additional water policy and technical studies. [\(24\)](#) Perhaps the most lasting effect of the WRC activities was the publication and subsequent revision of principles and standards, or principles and guidelines (P&Gs) for the evaluation of water resource projects, which are still used by federal water resource agencies for project planning and evaluation.

**National Water Commission.** The National Water Commission (NWC) was established by P.L. 90-515 (82 Stat. 868) on September 26, 1968 (S. 20, 90<sup>th</sup> Congress). The NWC was a seven-man commission appointed by the President; its membership excluded officers or employees of the United States Government. The genesis of the NWC lay in deliberations over the passage of the Central Arizona Project and competing proposals for extensive development of the Colorado River Basin, including potential importation of water from the Columbia River Basin. [\(25\)](#) The rationale for the NWC was to give a national perspective to the many serious long-range water problems brewing in many parts of the country. The 1973 report of the NWC included numerous conclusions and recommendations ranging from tightening federal (both executive and legislative branch) evaluation and cost-share procedures and policies for water resource projects (including navigation) to substantial revision of the Nation's water pollution control policy. With respect to future water projects, the report noted that water use is inherently "responsive to many variables in policy and technology as well as to rates of growth in the population and the economy which cannot be forecast with an assurance." [\(26\)](#) Regarding M&I supplies, the NWC recommended that a national policy be developed and enacted into law to clearly delineate the federal government's role in the provision of water for M&I uses and that such responsibility should remain with non-federal public and private entities. While

the report was issued during the end of the Nixon Administration and appeared lost among other national priorities of the time, it appears that many of the reports' recommendations were eventually adopted *via* changes in federal water pollution laws and regulations and laid the foundation for on-going changes in water resource project evaluation criteria, cost-share formulas, and pricing policies implemented during the 1980s.

**National Council on Public Works Improvement.** In 1988, the National Council on Public Works Improvement issued a report on America's public works. [\(27\)](#) The Council was established to assess the state of the country's infrastructure. The report was preceded by several sector-specific reports including reports on water supply, wastewater, and water resource issues, all published in May of 1987. The reports noted the growing state and local responsibility for a variety of water resource and water supply infrastructure and concluded in part that there was not an "infrastructure gap" requiring a federal subsidy. However, the reports did identify an increased need for technical assistance and education, especially for small water systems and rural areas. While infrastructure-funding gaps have been identified, [\(28\)](#) it has generally remained the federal policy that supplying water to individual communities is largely a local responsibility, supported by federal funding via grants and loans. These funds have largely been provided to assist in meeting treatment needs, consistent with national public health and environmental standards, not for meeting supply or resource needs.

**Western Water Policy Advisory Review Commission.** Congressional debate over western water policy during drought years of the early 1990s led to creation of the Western Water Policy Review Advisory Commission. Authorized in 1992 by title 30 of P.L. 102-575, the Commission completed its review of western water policy issues in 1998. The report recommended a new governance structure for watersheds and river basins as well as several other reforms of existing federal water policies and statutes. It specifically listed 10 "Principles of Water Management for the 21<sup>st</sup> Century." These ranged from promoting "sustainable use" of water to promoting social equity and employing participatory decision-making. The report's conclusions and recommendations were very controversial and criticized by several *ex-officio* (congressional) members of the Commission, including the then-chairmen of the Senate Appropriations and Senate Energy and Natural Resources Committees, and the then-chairman of the House Resources Committee.

**Other Efforts.** Many other studies, white papers, reports, and books have been written identifying problems and policy inconsistencies at the federal level; however, there has been no systematic review of nation-wide federal water *policy* since the 1973 NWC report. Similarly, there has been no formal water *assessment* of the Nation's water resources since the 1978 WRC national water assessment, although the United States Geological Survey (USGS) is preparing a report describing the scope and magnitude of efforts needed to provide periodic assessments of the status and trends in the availability and use of freshwater resources. In this same vein, Title IV of S. 1961, the Water Investment Act of 2002, would direct the Secretary of the Interior, acting through the USGS, to periodically assess the state of water resources in the United States. In contrast, H.R. 3561 would establish a Twenty-First Century Water Policy Commission to study all aspects of water management and develop recommendations for a comprehensive national water policy.

## Conclusion

Two centuries of project development and environmental and resource management activities have created a complex web of federal and state laws and regulations, contractual obligations, and economies based on

existing water resources infrastructure. While many experts and some states have called for better coordination of federal water policy activities, no *comprehensive* change in federal water resources management has occurred since enactment of the Water Resources Planning Act in 1965 (P.L. 89-80, 42 USC 1962 *et seq.*) Instead, changes have occurred incrementally, agency by agency, statute by statute. Where coordination of federal activity has occurred, it has been driven largely by pending crises, such as potential threatened or endangered species listings, droughts and floods, and by local or regional initiatives. New water supply, treatment, and re-use activities of traditional multi-purpose water resource agencies such as the Bureau and the Corps, combined with calls for an increased federal investment in wastewater treatment and drinking water infrastructure, and widespread drought in many areas of the country, are again raising questions related to the future federal role in water supply development and management and how such a role ought to be coordinated.

## APPENDIX

### Major Water Resources Study Commissions, Councils, and Assessments (1950-2000) [\(29\)](#)

NAME	YEAR(s)	REPORT(s)	MAJOR FINDING <i>RE:</i> SUPPLY/ AVAILABILITY	OVERALL RECOMMENDATIONS/ RESULTS
<b>President's Water Resources Policy Commission</b> (7 presidential appointees by President Truman)	1950 - Under Executive Order 10095 (Jan. 1950).	<i>A Water Policy for the American People</i> (Dec. 1950)  v. 1: General report  v. 2: Ten rivers in America's future.  v. 3: Water resources law	"Municipal supply should continue to be primarily a local responsibility. ... The growing needs ... should ... however be considered in connection with the planning of all comprehensive basin programs ... [and be] a fully reimbursable service." (p. 15)  Provided the conceptual foundation for the studies and report of the Senate Select Committee, which followed in 1961.	"The necessity of planning for a river basin as a whole instead of having a patch work of plans by separate agencies for separate purposes ..." (p. 9)  - plus procedures to determine investment benefits; for a repayment system; for financing basin-level programs; for improved planning information; and watershed management approaches.



<b>Senate Select Committee on National Water Resources</b>	1959-1961 (S. Res. 48, 86 <sup>th</sup> Congress)	<i>Final report of the Select Committee on National Water Resources.</i> S. Rept. 29, 87 <sup>th</sup> Congress, 1 <sup>st</sup> Sess., January 30, 1961. 147 p.  - Plus 32 Studies and 23 Hearings.	"Need for new capital investments by 1980 of \$12 billion for water storage facilities..."	<p>(1) Development of river basin plans</p> <p>(2) Funding grants to States</p> <p>(3) Coordinated federal applied research on water use, efficiency, conservation, as well as project evaluations</p> <p>(4) Periodic assessments of water supply-demand relationships</p> <p>(5) Flood plain regulation; water shortage studies; future needs study; and public hearings.</p> <p>Recommendations were largely included in the Water Resources Planning Act of 1965, which established the WRC and authorized several river basin commissions.</p> <p>[See Water Resources Council, below]</p>
<b>Water Resources Council</b> (established	1965-1983. Established by Title I of the Water Resources	<i>The Nation's Water Resources: the First National</i>	1968 Assessment "able to only partially catalogue ... measures of adequacy because of limited data	The assessment used existing information on water supply using a base year of 1965. The initial WRC

within the Executive office of the President)	Planning Act of 1965 (P.L. 89-80; 42 USC 1962a)  (First assessment issued in 1968)	<i>Assessment of the Water Resources Council</i> (Parts 1-7 transmitted to Congress by President Johnson on Nov. 12, 1968 under then extent authority of Title I of P.L. 89-80.)	and analytical procedures ..." [See Second (1975) Assessment, below]  Also noted "[w]ater supply problems are often local, sometimes regional, but seldom national in scope ... [m]any problems may be overlooked when a particular level of geographic detail and time duration is chosen." (p. 2-3.)	recommendations presumed that comprehensive studies, basin planning, research, and state assistance programs would provide future water policy direction.  Also noted that the assessment would survey a 50-year time horizon for evaluating emerging water problems rather than becoming involved in annual project appropriations and authorizations. (p. 2-1.)
<b>Water Resources Council (cont.)</b>	Second assessment issued in 1978.	<i>The Nation's Water Resources 1975-2000: The Second National Water Assessment by the U.S. Water Resources Council</i> (4 volumes: v. 1: Summary; v. 2: Water Quality; v. 3: Analytical Data; v. 4: Regional Reports) December 1978 (under authority of P.L. 89-80).	"Without ... careful management ... pressures from our technological society will continue to deplete and degrade the [now] ample supply [in] regional or local shortages ... at times caused by poor quality ... constraints." (p. 2). Report notes "considerable change" from the 1968 assessment - population growth had not occurred at the rate anticipated, nor had projections for future water requirements. Also, "greater awareness of environmental values, water quality, groundwater overdraft, limitations of available water supplies, and energy concerns are having a dramatic effect on water resources management." (p. 8).	Presents "first time nationally consistent current and projected water use and supply information by region and sub-region for the entire United States."
<b>National</b>	1968-1973 (under	<i>Water Policies</i>	"Need for a	The most comprehensive

<b>Water Commission</b> (seven non-federal members - presidential appointments)	authority in P.L. 90-515).	<i>for the Future: Final Report to the President and to the Congress</i> (1973, 579 pp.)  Plus 62 additional legal policy and technical studies.	comprehensive restatement of policy to govern the role of the federal agencies in meeting the Nation's need for municipal and industrial water supplies" ... "needs have not been adequately considered in ... studies ... [and] inequity ... govern[s] ... grants and low-cost loans ...." (pp. 166-169)	water study conducted, integrating policy recommendations on quantity, quality, environmental, economic, and institutional issues.  Note: this study had a policy focus rather than the assessment of trends and use of the WRC reports.
<b>National Council on Public Works Improvement</b> (five appointed private sector members)	1984-1988 Congressionally-created council under Public Law 98-501 to report to the President and Congress on the "State of the Nation's infrastructure."	Final report <i>Fragile Foundations: A Report on America's Public Works</i> (1988, 226 p.)  - Interim and background studies on water supply, water resources, and wastewater management facilities were published in May, 1987.  (Other studies reviewed airports and airways; highways, streets, roads and bridges; mass transit;	Did <u>not</u> find a national water supply "infrastructure gap" of a magnitude that would require a substantial federal subsidy.  <u>Did</u> find a national problem that "the majority of small water systems are poorly managed  "... lack ... technical training, ... inappropriate rate structures, ... lack of access to capital, and ... no economies of scale."	Recommended:  1) Full-cost pricing  2) Expanded regional allocation/ [basin] management  3) Expanded research to aid small systems  4) Trade association technical assistance for rural (drinking water systems)  5) Expanded State, local and Federal (EPA) education/ public outreach re: drinking water.

		intermodal transportation; hazardous waste management; and solid waste.)		
<b>Western Water Policy Review Advisory Commission</b>	1992 -- Title 30 of P.L. 102-575 directed the President to undertake a comprehensive review of federal activities in 19 western states and report to Congress with findings and recommendations.	<i>Water in the West: The Challenge for the Next Century</i> - reported to Congress by the Western Water Policy Review Advisory Commission in June 1998. Publication of the report was opposed by several key <i>ex-officio</i> (congressional) commission members.	Majority finding/ conclusion was that rapid population increases in the West are stressing limited supplies of water.  The report listed 10 "Principles of Water Management for the 21 <sup>st</sup> Century." These ranged from promoting "sustainable use" of water to promoting social equity and employing participatory decision-making.	Recommended a new "vested" governance structure for watersheds and river basins; increased federal role in resolving tribal water rights/ water needs; that federal agencies develop and implement comprehensive plans for aquatic ecosystem restoration and increase coordination of activities; integrate land water activities via reforms in the Clean Water Act and development of standards to protect the physical and biological aspects of instream water quality; actively "manage" water supplies as opposed to "develop" new supplies; manage development in flood plains; maintain critical water infrastructure; protect "productive" agricultural communities; and coordinate federal water policy.

1. More recent studies addressing drinking water and water and wastewater treatment facilities needs are not included in this analysis.
2. One major commission not included in this analysis is the National Commission on Water Quality, which was established by §315 of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500). The Commission was charged with making a full and complete investigation of all aspects of achieving or not achieving the effluent limitation goals established for 1983 and identifying any mid-course corrections that may need to be undertaken. The Commission's final report laid the groundwork for the Federal Water Pollution Control Act Amendments of 1977.
3. For more information on these authorities, see CRS Report RL30478, *Federally Supported Water*

*Supply and Wastewater Treatment Programs*, updated February 16, 2001.

4. More recently, Congress has authorized particular broadscale ecosystem restoration projects in connection with major federal water resource projects that previously altered natural water flows (*e.g.*, Everglades legislation in the 106<sup>th</sup> Congress (Title 6 of P.L. 106-541), California Bay-Delta legislation in the 104<sup>th</sup> Congress (Division E of P.L. 104-208); re-authorization of funding for the latter program is being debated in the 107<sup>th</sup> Congress (see H.R. 3208 and S. 1768)). Efforts to deal with water quality and resource protection issues in San Francisco Bay date back to the 1960s. Similarly, efforts to improve resource management of the Chesapeake Bay date back several decades.
5. "It is declared to be the policy of the Congress to recognize the primary responsibilities of the States and local interests in developing water supplies for domestic, municipal, industrial, and other purposes and that the Federal Government should participate and cooperate with States and local interests in developing such water supplies in connection with ... Federal navigation, flood control, irrigation, or multiple purpose projects." (43 USC §390(b))
6. A similar pilot program for "alternative water source" projects in non-reclamation states was authorized in 2000 (Title VI of P.L. 106-457; 114 Stat. 1975). Under this act, the Administrator of the Environmental Protection Agency is authorized to establish a pilot program to make grants for water conservation, reclamation, and re-use projects to meet critical water supply needs.
7. Comments of Senators Frank Murkowski, Jon Kyl, and others during mark-up of S. 1768, Senate Energy and Natural Resources Committee, May 16, 2002.
8. 7 USC 1926, with regulations at 7 CFR 1780.
9. 42 USC 3131, 3132, 3135, 3137; 42 USC 3211, with regulations at 13 CFR 302, 305, 316, and 317.
10. 42 USC 5301 *et seq.*, with regulations at 24 CFR 570.
11. 33 USC 1381-1387, with regulations at 40 CFR 35.3100.
12. 42 USC 300j-12, with regulations at 40 CFR 35.3500.
13. *Rules for the Committee on Resources*. U.S. House of Representatives, 107<sup>th</sup> Congress. Rule 6. Establishment of Subcommittees; Full Committee Jurisdiction; Bill Referrals. Adopted February 14, 2001. The full text of the Resources Committee's rules for the 107<sup>th</sup> Congress can be found at *Congressional Record* (daily edition), v. 147, February 26, 2001, pp. H402-H405.
14. This is not generally a question of what powers the federal government has and could exercise under the Constitution. Congress has often required that the United States defer to or comply with state law in the construction and operation of federal facilities pertaining to allocation, control, or distribution of water (*e.g.*, Sec. 8 of the Reclamation Act of 1902, 32 Stat. 390; 43 USC 372, 383). Other laws recognizing state primacy and their effects have been the



subject of much judicial interpretation.

15. Early efforts at coordinating federal activities in water policy included the Federal Interagency River Basin Committee (also known as "firebrick") and recommendations of the first Hoover Commission (1947 and 1948). In 1968, in its first assessment of the Nation's water supply, the Water Resources Council noted that "during the past 60 years, over 20 commissions or committees have looked into national water policies and problems." (*The Nation's Water Resources: The First National Assessment of the Water Resources Council*. (Washington, DC: U.S. Govt. Printing Office, 1968), p. 2-2.)

16. The recommendations for comprehensive planning had long been studied. As early as 1908, the Inland Waterways Commission and the National Conservation Committee of President Theodore Roosevelt recommended study of comprehensive national water resources planning and development. (U.S. Senate. Committee on Interior and Insular Affairs, *History of the Implementation of the Recommendations of the Senate Select Committee on National Water Resources*. 90<sup>th</sup> Congress, 2d Session. Senate Committee Print prepared at the request of Henry M. Jackson, Chairman. (Washington, DC: U.S. Govt. Printing Office, 1969), p. 15.)

17. Tensions between the executive branch and the legislative branch over fiscal constraints in water resources projects and planning, and state roles *vis-a-vis* federal agencies roles were apparent throughout the 1950s, and beyond. Omnibus Rivers and Harbors bills (a precursor to today's Water Resources Development Act (WRDA) bills) were vetoed by President Eisenhower in 1956 and in 1958, as were the Public Works Appropriations Act for FY1960 and proposed amendments to the Federal Water Pollution Control Act in 1960. As noted in the 1969 *History of the Implementation of the Recommendations of the Senate Select Committee on National Water Resources*, "[n]ot the least of the significant reasons for the existence of a hiatus in the field of water resources policy was the division of political power between the Republican Party which controlled the executive branch from 1953 to 1961, and the Democratic Party which controlled both Houses of Congress from January 1955 on." (See *Infra* note 14, p. 7.)

18. Established by S. Res. 48, 86<sup>th</sup> Congress, April 20, 1959. See also S. Res. 111, approved April 28 and S. 121, approved June 1, expanding the committee's membership and appointing the Chairman.

19. Senators Robert S. Kerr, Oklahoma (Chairman); Thomas H. Kuchel, California; Dennis Chavez, New Mexico; Allen J. Ellender, Louisiana; Warren G. Magnuson, Washington; Clinton P. Anderson, New Mexico; Henry M. Jackson, Washington; Claire Engle, California; Philip A. Hart, Michigan; Gale W. McGee, Wyoming; Frank E. Moss, Utah; James E. Murray, Montana; Milton R. Young, North Dakota; Andrew F. Schoepel, Kansas; Francis Case, South Dakota; Thomas E. Martin, Iowa; and Hugh Scott, Pennsylvania. *Infra* note 14, p. 8.

20. One source (see *Infra* 20, p. 399) notes the Secretary of Transportation became a statutory member of the Council in 1967 for "matters pertaining to navigation features of water resource projects;" however, U.S. Code notes state the Secretary of Transportation was added in 1975 (42 USC 1962a, amendments of P.L. 94-112).

21. National Water Commission. *Water Policies for the Future*. Final report to the President and to the Congress of the United States. (Washington DC, U.S. Govt. Printing Office: 1973), p. 399.

22. Water Resources Council. *The Nation's Water Resources, The First National Assessment of the Water Resources Council*. (Washington DC, U.S. Govt. Printing Office: 1968), p. 2-1. (Emphasis added.)

23. Water Resources Council. *The Nation's Water Resources, 1975-2000, The Second National Water Assessment by the U.S. Water Resources Council*. (Washington, DC, U.S. Govt. Printing Office: 1978.)
24. *Supra* note 20, p. 579.
25. *Ibid.*, p. ix. See also, Helen Ingram, *Water Politics, Continuity and Change*. (Albuquerque, University of New Mexico Press: 1990), p. 60.
26. *Ibid.* p. 17.
27. National Council on Public Works Improvement. *Fragile Foundations: A Report on America's Public Works. Final Report to the President and the Congress*. (Washington DC, U.S. Govt. Printing Office: 1988). 226 p.
28. The national debate about federal policy in these areas has been augmented for some time by several reports and recommendations of numerous private sector advocates and organizations seeking changes in policy, in the roles of government and others in implementing federal policy, and in federal investment in water infrastructure.
29. Appendix originally prepared by H. Steven Hughes, Analyst in Environmental Policy, Resources, Science, & Industry Division of CRS. This analysis does not include the National Commission on Water Quality, which was established by §315 of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500). The Commission was charged with making a full and complete investigation of all aspects of achieving or not achieving the effluent limitation goals established for 1983 and identifying any mid-course corrections that may need to be undertaken. A staff report was published in April 1976, which laid the groundwork for the Federal Water Pollution Control Act Amendments of 1977.

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